

## Claims

- [c1] 1. A method for on-demand recording of a voice session by a telephone recording device in a telecommunication network, the method comprising: establishing a voice session between the telephone recording device and at least one communication device; instructing the telephone recording device to store voice data during the voice session so long as the voice session has not been terminated; and processing the voice data by the telephone recording device to be transmitted to and saved at a storage server without going through a centrally located exchange device, wherein the saved voice data is available for on-demand replay.
- [c2] 2. The method of claim 1 further comprising duplicating the voice data at the telephone recording device and storing in a memory buffer device contained therein.
- [c3] 3. The method of claim 1 further comprising: temporarily storing the processed voice data in a memory buffer device in a storage server; and persistently storing the temporarily stored voice data in the storage server only after the instruction for recording is received.
- [c4] 4. The method of claim 1 wherein the processing further comprises digitizing the voice data.
- [c5] 5. The method of claim 1 wherein the instruction to store the voice data is initiated by a user of the telephone recording device through the recording device.
- [c6] 6. The method of claim 1 wherein the voice session is carried out through a local switch device which serves both the telephone recording device and the communication device without involving a centrally located exchange device.
- [c7] 7. The method of claim 1 wherein the voice session is carried out through two local switch devices directly connected therewith, a first local switch device servicing the telephone recording device and a second local switch device

servicing the communication device.

- [c8] 8. The method of claim 7 wherein the first local switch device is connected to the storage server.
- [c9] 9. The method of claim 7 wherein the first local switch device is connected to a call manager server for managing the voice session.
- [c10] 10. A system for on-demand recording of voice data, comprising:  
at least one local switch device for establishing a voice session between a communication device and a telephone recording device;  
a storage server connected to the local switch device for saving the voice data sent by the telephone recording device;  
a save initiator for dynamically initiating the voice data recording during the voice session,  
wherein the telephone recording device processes and transmits the voice data to the storage server through the local switch device without involving a centrally located exchange device.
- [c11] 11. The system of claim 10 wherein the centrally located exchange device is a private branch exchange (PBX).
- [c12] 12. The system of claim 10 wherein the local switch device is a hub device.
- [c13] 13. The system of claim 10 wherein the local switch device is a local switch.
- [c14] 14. The system of claim 10 wherein the telephone recording device includes a processor for digitizing the voice data.
- [c15] 15. The system of claim 10 wherein the save initiator is on the telephone recording device.
- [c16] 16. A telephone recording device used in an on-demand voice data recording system, comprising:  
means for establishing a voice session with a communication device through communications with at least one local switch device;  
a save initiator on the telephone recording device for dynamically initiating the

voice data recording during the voice session;  
a processing means for digitizing the voice data into a digital form;  
a storage buffering means for saving the digitized voice data;  
a transmission module for sending the digitized voice data from the storage buffering means to a storage server connected to the local switch device without involving a centrally located exchange device.

[c17] 17. A system for on-demand recording of voice data, the system comprising:  
a telephone recording device connected to a first local switch device;  
at least one communication device connected to a second local switch device for establishing a voice session with the telephone recording device through a communication link between the first and second local switch device;  
a save initiator for dynamically initiating the voice data recording during the voice session; and  
a storage server connected to the first local switch device for saving the voice data sent by the telephone recording device;  
wherein the telephone recording device processes and transmits the voice data to the storage server through the first local switch device without involving a centrally located exchange device.

[c18] 18. A system for peer-to-peer on-demand recording of voice data, the system comprising:  
a telephone recording device and at least one communication device connected to a local switch device, the telephone recording device having:  
a save initiator for dynamically initiating the voice data recording after a voice session is established between the telephone recording device and the communication device; and  
a processing means for packetizing the voice data;  
a memory buffer for temporarily storing the voice data; and  
a storage server connected to the local switch device for storing the temporarily saved voice data sent by the telephone recording device.

[c19] 19. The system of claim 18 further comprising a replay means on the telephone recording system for playing back the stored voice data.

- [c20] 20. The system of claim 18 wherein the memory buffer is on the telephone recording device.
- [c21] 21. The system of claim 18 wherein the memory buffer is on the storage server.
- [c22] 22. A method for storing a peer-to-peer telephone conversation session between a coordinating user using a telephone recording device and at least one regular user using at least one communication device which does not have a recording feature, the method comprising:  
 establishing the peer-to-peer telephone conversation session between the telephone recording device and the communication device through a local switch device;  
 temporarily saving voice data of the session in a memory buffer of the telephone recording device; and  
 instructing, before the session ends, the telephone recording device to store the temporarily saved voice data in a storage server connected to the local switch device.
- [c23] 23. The method of claim 20 further comprising replaying the stored voice data.